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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,254	03/08/2001	Steven C. Nichols	NRS - 65001/102/101	6561

128   7590   02/21/2007
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EXAMINER
MILLS, DONALD L

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
	09/802,254	NICHOLS, STEVEN C.
Office Action Summary	Examiner	Art Unit	
	Donald L. Mills	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)
                                               Paper No(s)/Mail Date. _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application
3)☐ Information Disclosure Statement(s) (PTO/SB/08)   6)☐ Other: _____ .
     Paper No(s)/Mail Date _____ .

DETAILED ACTION

Response to Amendment

1.   Applicant's request for reconsideration of the finality of the rejection of the last Office

action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-7 and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al

(US 5,987,554), hereinafter referred to as Liu.

Regarding claims 1 and 10, Liu discloses a method and system of controlling the transfer

of information across an interface between two buses, which comprises:

A message assembly register for receiving bit patters (Referring to Figure 2, request

buffer **203** stores request data in the order that it is received. See column 6, lines 60-62;)

A message-generating module receiving the report query message signal and the

associated data signal and forming therefrom in the message assembly register a report message

having as leading bits thereof a report message header specified by the query data field in the

report query message signal, each of the at least first and second nodes providing an identical

report message header responsive to a particular query data field value, and as low order bits

thereof a series of bits representing the data value in the data signal generated by the node

involved (Referring to Figure 2, response buffer **205** queues outgoing response data that they are

received. The outgoing response data format is identical (identical report message header) with

corresponding data as dictated from CPU A controller 03 **109** (first node) and CPU B Controller

04 **111** (second node). See column 6, lines 51-67;)

   A message-synchronizing module providing a synchronizing signal on the data path

(Referring to Figures 1 and 2, the system interface commands **105** are executed synchronously.

See column 7, lines 51-52;) *and*

   A message selection module copying a message assembled in the message assembly

register into the send register, and responsive to the synchronizing signal, providing the send

signal to the message-sending module (Referring to Figure 2, the request buffer **203** stores

request data in the order that it is received. See column 6, lines 60-62. And, response buffer **205**

queues outgoing response data in the order that they are received. See column 6, lines 51-67.)

   Regarding claims 2 and 11, Liu discloses *in each of the at least first and second nodes a*

memory for holding a query response list having a plurality of entries, each entry including a

query data field value in association with a report message header value, and wherein the

message-generating module further includes an element receiving the report query message

signal and searching the query response list for a query data field value equaling the query data

field value encoded in the report query message signal, and forming a report message in the

message assembly register having the report message header associated in the query response

list with the query data field value encoded in the report query message signal (Referring to

Figure 2, in association with CPU A controller 03 **109** (first node) and CPU B Controller 04 **111**

(second node) the request buffer **203** stores request data in the order that it is received. And

transmitting messages from the response buffer **205** that are associated with the requests. See

column 6, lines 51-67.)

Regarding claims 3 and 12, Liu discloses *in each of the at least first and second nodes a*

memory for holding a send message queue having a plurality of messages and wherein the

message generating module in each of the first and second nodes stores in the send message

queue the contents of the message assembly register upon forming a report message therein, and

wherein the message selection module selects individual messages from the send message queue,

copies selected messages in to the send register, and responsive to a synchronizing signal

occurring thereafter, provides the send signal to the message sending module (Referring to

Figure 2, in association with CPU A controller 03 **109** (first node) and CPU B Controller 04 **111**

(second node) the response buffer **205** queues outgoing response data in the order that they are

received. And transmitting messages from the response buffer **205** that are associated with the

requests. See column 6, lines 51-67.)

Regarding claims 4 and 13, Liu disclose *each message selection module includes an*

element employing arbitration-based message selection to select messages to copy into the send

register (Referring to Figures 1 and 2, the system interface commands **105** are executed

synchronously thereby effectuating the reception and transmission of data. See column 7, lines

49-59.)

Regarding claims 5 and 14, Liu discloses *each element employing arbitration-based*

message selection selects messages in the send message queue whose numeric value is largest

when all of the messages in the send message queue are treated as numeric values (Referring to

Figures 1 and 2, the system interface commands **105** instruct request buffer **203** and response

buffer **205** which operate in a FIFO technique, thereby, selecting the next message which has

been in the queue the longest time. In this manner, the message with the largest delay is treated

first. See column 7, lines 26-35.)

Regarding claims 6 and 15, Liu discloses *each element employing arbitration-based*

message selection selects messages in the send message queue whose numeric value is smallest

when all of the messages in the send message queue are treated as numeric values (Referring to

Figures 1 and 2, the system interface commands **105** instruct request buffer **203** and response

buffer **205** which operate in a FIFO technique, thereby, selecting the next message which has

been in the queue the longest time. In this manner, the first message is served. See column 7,

lines 26-35.)

Regarding claims 7 and 16, Liu discloses *each of the at least first and second nodes a*

message-receiving module receiving the signal levels on the data path and from them forming

individual incoming bit values, from the incoming bit values detecting the end of each message,

and responsive to detecting the end of a message, providing the synchronizing signal (Referring

to Figures 1 and 2, the system interface commands **105** are executed synchronously thereby

effectuating the reception and transmission of data. See column 7, lines 49-59.)

Regarding claim 9, Liu discloses *wherein each message-synchronizing module comprises*

an end-of-message detector in electrical connection to the data path and providing the

synchronizing signal responsive to the end of each message (Referring to Figures 1 and 2, the

system interface commands **105** are executed synchronously thereby effectuating the reception

and transmission of data. See column 7, lines 49-59.)

Allowable Subject Matter

4.   Claims 8 and 17 are objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Response to Arguments

5.   Applicant's arguments with respect to claims 1-17 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

        Schofield, M. J., "Controller Area Network – How CAN works," pp. 1-5.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The

examiner can normally be reached on 8:00 AM to 4:30 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills

February 13, 2007

Seema S. Rao 2/15/07
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SUPERVISORY PATENT EXAMINER
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